

10/539437

JC20 Rec'd PCT/PTO 20 JUN 2005

PATENT
Docket No. 32860-000900/US

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant(s): Walter GUMBRECHT et al.

Int'l Application No.: PCT/DE2003/004136

Application No.: **NEW APPLICATION**

Filed: June 20, 2005

For: METHOD AND DEVICE FOR PCR-AMPLIFICATION AND
DETECTION OF NUCLEOTIDE SEQUENCES

**INFORMATION DISCLOSURE STATEMENT
(SUBMISSION CONCURRENT WITH THE
FILING OF A NEW PATENT APPLICATION)**

Customer Service Window
Randolph Building
401 Dulany Street
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June 20, 2005

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. **LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION**

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. **COPIES**

Submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.

This application is a National Phase of a PCT application. All of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should be forwarded from the International Search Authority. If copies are needed, please contact the undersigned.

Because the present application is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.

III. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

a. DOCUMENTS IN THE ENGLISH LANGUAGE

The attached patents, publications, or other information in the English language do not require a statement of relevancy.

b. DOCUMENTS NOT IN THE ENGLISH LANGUAGE

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

Many of the documents have been discussed in the PCT Search Report, the PCT Preliminary Examination Report, and/or throughout the specification. The PCT Search Report and German translation aid translating key terms into English, indicate the degree of relevance found by the PCT Office, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

c. ENGLISH LANGUAGE SEARCH REPORT

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

d. OTHER

The following additional information is provided for the Examiner's consideration.

- International Search Report, International Preliminary Examination Report and German Translation Aid.

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New PCT National Phase Application
Docket No. 32860-000900/US

FEES

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 08-0750.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

By: 
Donald J. Daley, Reg. No. 34,313

DJD/smk

P.O. Box 8910
Reston, Virginia 20195
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Enclosures: Form PTO-1449(s)
 Documents
 Foreign Search Reports

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PTO/SB/08a (05-03)

Approved for use thru 03/30/2003, OMB 0651-0031

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known 107539437 New Application	
Application Number	
Filing Date	June 20, 2005
First Named Inventor	Walter GUMBRECHT et al.
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	32860-000900/US

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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STATEMENT BY APPLICANT

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Sheet

of

Complete if Known

Application Number **10/7539437**Filing Date **June 20, 2005**First Named Inventor **Walter GUMBRECHT et al.**Group Art Unit **Unknown**Examiner Name **Unknown**Attorney Docket Number **32860-000900/US**

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	8	Fuchs et al: "A silicon lab-on-chip for integrated sample preparation by pcr and dna analysis by hybridization" Annual International IEEE-EMBS special topic conference on microtechnologies in medicine and biology. Proceedings, XX, XX, 2.5.2002, S. 227-231, XP001180969	
	9	Hodko D et al: "Detection of pathogens using on-chip electrochemical analysis of pcr amplified dna molecules". Proceedings of the Spie, Spie, Bellingham, VA, US, Bd. 4265, 25.01.2001, S. 65-74, XP008000573	
	10	Sosnowski R G et al: "Rapid determination of single base mismatch mutations in dna hybrids by direct electric field control" Proceedings of the national academy of sciences of USA, National Academy of Science, Washington, US, Bd. 94, Februar 1997, S. 1119-1123, XP000857636	
	11	Gilles P N et al: "Single nucleotide polymorphic discrimination by an electronic dot blot assay on semiconductor microchips" Nature Biotechnology, Nature Publishing, US, Bd. 17, April 1999, S. 365-370	
	12	Tillib SV, Strizhkov BN, Mirzabekov AD, Datenbank PubMed bei NCBI, Anal. Biochem. (2001) 292 (1) 155-60	
	13	Dubiley, S. u.a.: Polymorphism analysis and gene detection by minisequencing on an array of gel-immobilized primers, Nucleic Acids Research, 1999, Vol. 27, No. 18, e19, 1-6	
	14	Strizhkov, B.N. u.a.: PCR amplification on a microarray of gel-immobilized oligonucleotides: detection of bacterial toxin- and drug-resistant genes and their mutations. Biotechniques (2000) 29 (4) 844-8, 850-2, 854	
	15	Kolchinski, A. & Mirzabekov A.: Analysis of SNPs and other genomic variations using gel-based chips, Hum Mutat. (April 2002) 19 (4) 343-60	

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1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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